

To be used with  
**Corn – An A-Mazing Plant**

Name \_\_\_\_\_

## **A Golden Nugget**

### **The Endosperm**

The endosperm is about 82 percent of the kernel's dry weight. It is the source of energy and protein (starch) for the germinating seed. There are two types of endosperm, soft and hard. In the hard endosperm, starch is packed tightly together. In the soft endosperm, the starch is loose. When corn dries in the field before the harvest, the moisture causes the soft endosperm to collapse and form a dent in the top of the kernel.

### **The Pericarp**

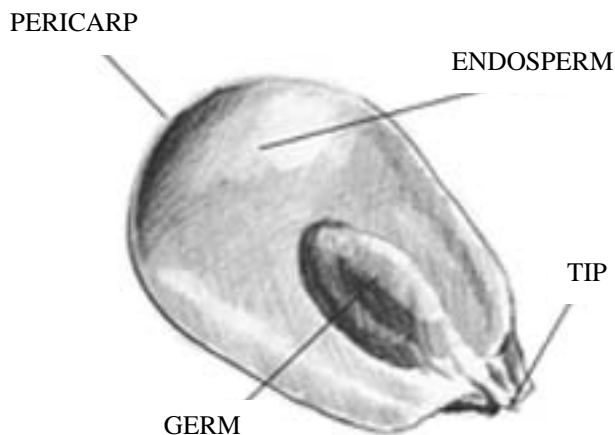
The pericarp is the outer covering of the kernel that protects it from deterioration. It resists water and water vapor and is undesirable to insects and microorganisms.

### **The Tip Cap**

The tip cap is the only area of the kernel not covered by the pericarp. It was the attachment point of the kernel to the cob. It is the major entry path into the kernel.

### **The Germ**

The germ is the only living part of the corn kernel. It contains the essential genetic information, enzymes, vitamins, and minerals for the kernel to grow into a corn plant. About 25 percent of the germ is corn oil. Corn oil is the most valuable part of the corn kernel because the amount of linoleic fatty acid (polyunsaturated fat) and its bland taste.



### **Corn Components**

Starch	61.0%
Feed	19.2%
Oil	3.8%
Water	16.0%